

REMARKS

In view of the above amendments and the following remarks, favorable reconsideration of the outstanding office action is respectfully requested.

Claims 1-2, 4-10, 12-23, 25-34 and 36-46 remain in this application. Claims 3, 11, 24 and 35 have been canceled. Applicant believes that no new matter is added to the application as part of this response.

1. Amendments

Claims 1, 22 and 39 have been amended to recite that the curable coating composition comprises 20-80% of at least one terminally acrylated oligomer comprising a poly(propylene glycol) containing polyol soft block having a number average molecular weight of more than about 4000 Daltons, and 20-80% of a propylene oxide containing monofunctional acrylate monomer. Support for this amendment appears in the specification as filed at page 8, line 28 – page 9, line 17.

Claims 12 and 33 have been amended to delete the recitation of “propylene oxide ethoxylated oxides.”

Claim 46 has been rewritten to more clearly recite the Markush group.

2. Claim Rejections - 35 U.S.C. §112

The Examiner has rejected claims 1-3, 7-24 and 28-46 under 35 U.S.C. §112, first paragraph, as not being enabled by the specification.

Claims 3, 11, 24 and 35 have been canceled, rendering moot the Examiner's rejections thereof.

Claims 1-2, 7-10, 12-23, 28-34 and 36-46 have been rewritten to recite that the curable coating composition comprises 20-80% of at least one terminally acrylated oligomer comprising a poly(propylene glycol) containing polyol soft block having a number average molecular weight of more than about 4000 Daltons, and 20-80% of a propylene oxide containing monofunctional acrylate monomer.

While particular capping agents and diisocyanates are used to make the oligomers in the Examples of the present specification, Applicant submits that only routine experimentation would be necessary for the skilled artisan to substitute other capping agents and diisocyanates in conjunction with poly(propylene glycol)

containing polyols to make other oligomers suitable for use in the present invention. Likewise, the skilled artisan will be able to use only routine experimentation to substitute other suitable propylene oxide containing monomers for those described in the Examples.

The Examiner has rejected claim 46 under 35 U.S.C. §112, second paragraph, as being indefinite. Claim 46 has been rewritten to more clearly recite a Markush group, using the conventional "selected from the group consisting of A, B and C" construction.

The Examiner has rejected claims 12 and 33 under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 12 and 33 have been rewritten to remove the recitation of "propylene oxide ethoxylated oxides."

3. Claim Rejections - 35 U.S.C. §102 – Chawla

The Examiner has rejected claims 1, 7, 12-15, 18, 20 and 21 under 35 U.S.C. §102(b) as being anticipated by Chawla (U.S. Patent 5,907,023).

Claims 1, 7, 12-15, 18, 20 and 21 have been rewritten to recite that the curable coating composition comprises 20-80% of at least one terminally acrylated oligomer comprising a poly(propylene glycol) containing polyol soft block having a number average molecular weight of more than about 4000 Daltons, and 20-80% of a propylene oxide containing monofunctional acrylate monomer. While Chawla does list poly(propylene glycol) as one of many possible polyether polyol blocks, and one propylene oxide containing monomer as one of many possible reactive diluents, it does not teach or suggest the combination of a high molecular weight poly(propylene glycol) containing polyol soft block with a propylene oxide containing monomer to yield a cured material having a high tensile strength and low modulus. Since Chawla does not teach the claimed combination, Applicant submits that it does not anticipate rewritten claims 1, 7, 12-15, 18, 20 and 21; and requests that the Examiner withdraw the rejections thereof.

4. Claim Rejections - 35 U.S.C. §102 – Ohba *et al.*

The Examiner has rejected claims 1-3, 7, 13-15, 18-24, 28, 34-36 and 39-42 under 35 U.S.C. §102(a) as being anticipated by Ohba *et al.* (EP 1 046 619).

Claims 3, 24 and 35 have been canceled, rendering moot the Examiner's rejections thereof.

Claims 1, 2, 7, 13-15, 18-23, 28, 34, 36 and 39-42 have been rewritten to recite that the curable coating composition comprises 20-80% of at least one terminally acrylated oligomer comprising a poly(propylene glycol) containing polyol soft block having a number average molecular weight of more than about 4000 Daltons, and 20-80% of a propylene oxide containing monofunctional acrylate monomer. While Ohba *et al.* does list a poly(propylene glycol) containing oligomer as one of many possible oligomers, and one propylene oxide containing monomer as one of many possible reactive diluents, it does not teach or suggest the combination of an oligomer having poly(propylene glycol) containing a $M_n > 4000$ Da polyol soft block with a propylene oxide containing monomer to yield a cured material having a high tensile strength and low modulus. Since Ohba *et al.* does not teach the claimed combination, Applicant submits that it does not anticipate rewritten claims 1, 2, 7, 13-15, 18-23, 28, 34, 36 and 39-42; and requests that the Examiner withdraw the rejections thereof.

5. Claim Rejections - 35 U.S.C. §102 - Ishikawa *et al.*

The Examiner has rejected claims 1, 2, 7, 13-18, 20-23, 28, 34-40 and 44 under 35 U.S.C. §102(a) as being anticipated by Ishikawa *et al.* (WO 99/08975).

Claim 35 has been canceled, rendering moot the Examiner's rejections thereof.

Claims 1, 2, 7, 13-18, 20-23, 28, 34, 36-40 and 44 have been rewritten to recite that the curable coating composition comprises 20-80% of at least one terminally acrylated oligomer comprising a poly(propylene glycol) containing polyol soft block having a number average molecular weight of more than about 4000 Daltons, and 20-80% of a propylene oxide containing monofunctional acrylate monomer. While Ishikawa *et al.* does list a poly(propylene glycol) containing oligomer as one of many possible oligomers, and a couple of propylene oxide containing monomers in a list of many possible reactive diluents, it does not teach or suggest the combination of an oligomer having a poly(propylene glycol) containing $M_n > 4000$ Da polyol soft block with a propylene oxide containing monomer to yield a cured material having a high tensile strength and low modulus. Since Ishikawa *et al.* does not teach the claimed combination, Applicant submits that it does not anticipate rewritten claims 1, 2, 7, 13-18, 20-23, 28, 34, 36-40 and 44; and requests that the Examiner withdraw the rejections thereof.

6. Claim Rejections - 35 U.S.C. §103 - Ishikawa *et al.*

The Examiner has rejected claims 1-46 under 35 U.S.C. §103(a) as being unpatentable over Ishikawa *et al.* (WO 99/08975).

Claims 3, 11, 24 and 35 have been canceled, rendering moot the Examiner's rejections thereof.

Claims 1, 2, 4-10, 12-23, 25-34 and 36-46 have been rewritten to recite that the curable coating composition comprises 20-80% of at least one terminally acrylated oligomer comprising a poly(propylene glycol) containing polyol soft block having a number average molecular weight of more than about 4000 Daltons, and 20-80% of a propylene oxide containing monofunctional acrylate monomer. The present application teaches that such compositions have low viscosities, and can be cured to give materials having low modulus, high tensile strength, low glass transition temperatures, and high elongation (pages 8-9).

To establish a *prima facie* case of obviousness, the Examiner must provide some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. M.P.E.P. §2143. Ishikawa *et al.* does list a poly(propylene glycol) containing oligomer as one of many possible oligomers, and a couple of propylene oxide containing monomers in a list of many possible reactive diluents. However, Ishikawa *et al.* appears to provide no suggestion as to the desirability of the combinations recited in the presently pending claims. Specifically, Applicant submits the skilled artisan would not be motivated to combine a propylene oxide containing monomer with an oligomer having a poly(propylene glycol) containing $M_n > 4000$ Da polyol soft block to form a composition curable to a high tensile strength and low modulus.

Since the Examiner has not provided a motivation based on Ishikawa *et al.* to make the invention claimed in claims 1, 2, 4-10, 12-23, 25-34 and 36-46, Applicant submits that they are not rendered unpatentable by the reference, and requests that the rejections under 35 U.S.C. §103(a) thereof be withdrawn.

7. Conclusion

Based upon the above amendments, remarks, and papers of record, Applicant believes the pending claims 1, 2, 4-10, 12-23, 25-34 and 36-46 of the above-captioned application are in allowable form and patentable over the prior art of record.

Applicant respectfully requests reconsideration of the pending claims and a prompt Notice of Allowance thereon.

Applicant believes that no extension of time is necessary to make this Response timely. Should Applicant be in error, Applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. §1.136(a) as necessary to make this Reply timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

Please direct any questions or comments to James V. Suggs at 607/974-3606.

Date: 9-8-03

Respectfully submitted,

CORNING INCORPORATED



James V. Suggs

Registration No. 50,419

Corning Incorporated

Intellectual Property Department

Mail Stop SP-TI-03-1

Corning, NY 14831